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EXAMINER

TOTH, KAREN E

ART UNIT

PAPER NUMBER

3736

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Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/727,043 | TANABE ET AL. | |
| | Examiner | Art Unit | |
| | Karen E. Toth | 3736 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>6/2/04 & 10/13/05</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 5 and 6 are rejected under 35 U.S.C. 102(a) as being anticipated by Ogura'675 (US Patent Application Publication 2003/0139675).

Regarding Claim 1, Ogura'675 discloses an apparatus comprising a pressure pulse wave detection device (element 36); a device for processing the detected pressure pulse wave (element 32); a device for measuring blood pressure (element 86); and a display unit (element 79). The pulse wave processing device is used to determine characteristic points of the detected pulse wave, calculate characteristic parameters, and calculate an index of a pulse wave reflection from said parameters (paragraph [0050]). The display unit is used to display the calculated index and measured blood pressure (paragraph [0054]).

Regarding Claim 2, Ogura'675 further discloses that the characteristic points used to determine the index are peak points of the traveling and reflected pressure pulse waves, and that the index is a ratio of the amplitude of the wave components at those peak points (paragraph [0050]).

Regarding Claim 5, Ogura'675 further discloses that the index comprises an augmentation index (paragraph [0002]).

Regarding Claim 6, Ogura'675 further discloses that the index is determined as function of the pulse of the subject (paragraph [0065]).

3. Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Goodman'613 (US Patent 6616613).

Regarding Claim 1, Goodman'613 discloses an apparatus (element 10) comprising a pulse wave detection device (element 12); a device for processing the detected pulse wave (element 14); a device for measuring blood pressure (column 13, lines 20-24); and a display unit (element 7). The pulse wave processing device is used to determine characteristic points of the detected pulse wave, calculate characteristic parameters, and calculate an index of a pulse wave reflection from said parameters (column 17, lines 5-11).

Regarding Claim 3, Goodman'613 further discloses that said index is a measure of time between a component of the traveling wave and component of the reflected wave (column 24, lines 48-51).

4. Claims 12 and 14 are rejected under 35 U.S.C. 102(a) as being anticipated by Goodman'613.

Regarding Claim 12, Goodman'613 discloses an apparatus (element 10) comprising a pulse wave detection device (element 12); a device for processing the detected pulse wave (element 14); and a display unit (element 7). The processing device may be used to calculate several different indices from the pulse wave (column

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23, line 63 to column 24, line 2; and column 24, lines 40-45). The display device may be used to display the correlation between said indices (Figure 19).

Regarding Claim 14, Goodman'613 further discloses that said apparatus may be used to measure blood pressure (column 13, lines 20-24), and that the blood pressure measurement may be displayed on the display, as shown in Figure 19 (column 26, lines 3-6; column 35, lines 36-39).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claim 4/1,2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogura'675 in view of Ogura'754 (US Patent 6702754).

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Ogura'675 discloses all the elements of the current invention, as applied to Claims 1 and 2 above, except for the computation unit adjusting the calculated index based on an adjustment factor of the subject.

Ogura'754 teaches a pulse wave detecting device that uses adjustment factors (elements T and ST) to adjust the measured pulse wave of the subject, since the measured pulse wave is dependent upon said factors (column 8, lines 47-62, and column 13, lines 41-59).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the apparatus of Ogura'675 and used adjustment factors to adjust the measured pulse wave of the subject, as taught by Ogura'754, because the measured pulse wave is dependent upon adjustment factors.

8. Claim 4/1,3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Ogura'754 (US Patent 6702754).

Goodman'613 discloses all the elements of the current invention, as applied to Claims 1 and 3 above, except for the computation unit adjusting the calculated index based on an adjustment factor of the subject.

Ogura'754 teaches a pulse wave detecting device that uses adjustment factors (elements T and ST) to adjust the measured pulse wave of the subject, since the measured pulse wave is dependent upon said factors (column 8, lines 47-62, and column 13, lines 41-59).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the apparatus of Goodman'613 and used adjustment

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factors to adjust the measured pulse wave of the subject, as taught by Ogura'754, because the measured pulse wave is dependent upon adjustment factors.

9. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Hatschek'916

Regarding Claim 7, Goodman'613 discloses all the elements of the current invention, as applied to Claim 3 above, except for the index comprising the time difference between the starting point of an ejection wave and the starting point of a reflection wave (ΔT_P).

Hatschek'916 teaches measuring the difference in phase between an ejection wave and a reflected wave (column 7, lines 51-56) in order to measure the velocity of the pressure pulse wave (column 8, lines 16-20) so that a more clear status of the patient's condition may be determined.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the apparatus of Goodman'613 with the index comprising the time difference between the starting points of the ejection and reflection waves, as taught by Hatschek'916, in order to more clearly determine the status of the patient's condition.

Regarding Claim 8, Goodman'613 further discloses that the pulse wave velocity may be adjusted for the height of the patient (column 23, lines 13-15; column 24, lines 56-58).

10. Claim 9/1,2,5,6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogura'675 in view of Tanaka'960 (US Patent Application Publication 2004/0077960).

Ogura'675 discloses all the elements of the current invention, as applied to claims 1, 2, 5, and 6 above, and further discloses that the device comprises a memory device (elements 32, 77, and 78) to store data (paragraph [0055]). Ogura'675 does not disclose the device comprising a memory device that stores a plurality of the calculated indices and measured blood pressures in chronological order.

Tanaka'960 teaches a device for measurement of physiological signals comprising a memory device that stores said signals in chronological order (paragraph [0035]), in order to more easily store and retrieve the data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the device of Ogura'675 with the chronological memory storage of Tanaka'960, in order to more easily store and retrieve the data.

The examiner notes that if the applicant were to perfect the claim to foreign priority by filing a certified translation, this rejection would be overcome.

11. Claim 9/7,8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Hatschek'916, and further in view of Tanaka'960.

Goodman'613 in view of Hatschek'916 discloses all the elements of the current invention, as applied to Claims 7 and 8 above; Goodman'613 further discloses that the device comprises a central processing unit (CPU) (element 5) that is used to store the physiological data to memory for future retrieval (column 18, lines 14-16). Goodman'613 does not disclose the memory unit storing the data in chronological order.

Tanaka'960 teaches a device for measurement of physiological signals comprising a memory device that stores said signals in chronological order (paragraph [0035]), in order to more easily store and retrieve the data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the device of Goodman'613 in view of Hatschek'916 with the chronological memory storage of Tanaka'960, in order to more easily store and retrieve the data.

12. Claim 9/1,3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Tanaka'960.

Goodman'613 discloses all the elements of the current invention, as applied to Claims 1 and 3 above, and further discloses that the device comprises a central processing unit (CPU) (element 5) that is used to store the physiological data to memory for future retrieval (column 18, lines 14-16). Goodman'613 does not disclose the memory unit storing the data in chronological order.

Tanaka'960 teaches a device for measurement of physiological signals comprising a memory device that stores said signals in chronological order (paragraph [0035]), in order to more easily store and retrieve the data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the device of Goodman'613 with the chronological memory storage of Tanaka'960, in order to more easily store and retrieve the data.

13. Claim 10/1,2,5,6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogura'675 in view of Tanaka'960, and further in view of Goodman'613.

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Ogura'675 in view of Tananka'960 discloses all the elements of the current invention, as applied to Claim 9/1,2,5,6 above, except for the display unit showing the chronologically stored indices.

Goodman'613 teaches a pulse wave measuring apparatus comprising a display unit (element 7) that may be used to display data stored in the CPU (element 5) (column 18, lines 16-17) in order for the subject's status to be analyzed.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the apparatus of Ogura'675 in view of Tananka'960, and further used the display to show data stored in the memory unit, as taught by Goodman'613, in order to fully analyze the subject's status.

14. Claim 10/1,3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Tananka'960.

Goodman'613 in view of Tananka'960 discloses all the elements of the current invention, as applied to Claim 9/1,3 above, except for the display unit showing the chronologically stored indices. Goodman'613 further discloses that the display unit (element 7) may be used to display data stored in the CPU (element 5) (column 18, lines 16-17) in order for the subject's status to be analyzed.

15. Claim 10/7,8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Hatschek'916 and Tananka'960, as applied to claim 9/7,8 above.

Goodman'613 in view of Hatschek'916 and Tananka'960 discloses all the elements of the current invention, as applied to Claim 9/7,8 above, except for the display unit showing the chronologically stored indices.

Goodman'613 further discloses that the apparatus comprises a display unit (element 7) that may be used to display data stored in the CPU (element 5) (column 18, lines 16-17) in order for the subject's status to be analyzed.

16. Claim 11/1,2,5,6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogura'675 in view of Goodman'613, and further in view of Utsugi'228 (US Patent Application Publication 2001/0056228).

Ogura'675 discloses all the elements of the current invention, as applied to claims 1, 2, 5, and 6 above, except for the display unit showing a prescription based on the patient's physiological measurements.

Goodman'613 also teaches a pulse wave measurement apparatus, which further comprises a communication network (element 18) that is used to bring the local results into contact with outside storage, databases, and users, so that further processing and analysis of the patient's condition may be assessed.

Utsugi'228 teaches a communication network for health systems that is used to bring local results into contact with outside storage, databases, and users (Figures 1, 3, and 4). The communication network is also used to allow a prescription data processing section to communicate with the subject, so that prescriptions may be displayed in response to the subject's physiological measurements in order to reduce the amount of time between testing and diagnosis.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the apparatus of Ogura'675, and added the communication network of Goodman'613 in order to bring the local measurement results into contact with outside databases and users, and further included the prescription data processing section of Utsugi'228 as part of the communication network in order to reduce the amount of time between testing and diagnosis.

17. Claim 11/1,3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Utusgi'228.

Goodman'613 discloses all the elements of the current invention, as applied to Claim 3 above, except for the display unit showing a prescription based on the patient's physiological measurements. Goodman'613 further discloses that the apparatus comprises a communication network (element 18) that is used to bring the local results into contact with outside storage, databases, and users, so that further processing and analysis of the patient's condition may be assessed.

Utsugi'228 teaches a communication network for health systems that is used to bring local results into contact with outside storage, databases, and users (Figures 1, 3, and 4). The communication network is also used to allow a prescription data processing section to communicate with the subject, so that prescriptions may be displayed in response to the subject's physiological measurements in order to reduce the amount of time between testing and diagnosis.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the apparatus of Goodman'613 and further included

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the prescription data processing section of Utsugi'228 as part of the communication network in order to reduce the amount of time between testing and diagnosis.

18. Claim 11/7,8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Hatschek'916 as applied to claims 7 and 8 above, and further in view of Utsugi'228.

Goodman'613 in view of Hatschek'916 discloses all the elements of the current invention, as applied to claims 7 and 8 above, except for the display unit showing a prescription based on the patient's physiological measurements.

Goodman'613 further discloses that the pulse wave measurement apparatus comprises a communication network (element 18) that is used to bring the local results into contact with outside storage, databases, and users, so that further processing and analysis of the patient's condition may be assessed.

Utsugi'228 teaches a communication network for health systems that is used to bring local results into contact with outside storage, databases, and users (Figures 1, 3, and 4). The communication network is also used to allow a prescription data processing section to communicate with the subject, so that prescriptions may be displayed in response to the subject's physiological measurements in order to reduce the amount of time between testing and diagnosis.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the apparatus of Goodman'613 and Hatschek'916, and included the prescription data processing section of Utsugi'228 as part of the

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communication network in order to reduce the amount of time between testing and diagnosis.

19. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Utsugi'228.

Goodman'613 discloses all the elements of the current invention, as applied to Claim 12 above, except for the display unit showing a prescription based on the patient's physiological measurements. Goodman'613 further discloses that the apparatus comprises a communication network (element 18) that is used to bring the local results into contact with outside storage, databases, and users, so that further processing and analysis of the patient's condition may be assessed.

Utsugi'228 teaches a communication network for health systems that is used to bring local results into contact with outside storage, databases, and users (Figures 1, 3, and 4). The communication network is also used to allow a prescription data processing section to communicate with the subject, so that prescriptions may be displayed in response to the subject's physiological measurements in order to reduce the amount of time between testing and diagnosis.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the apparatus of Goodman'613 and further included the prescription data processing section of Utsugi'228 as part of the communication network in order to reduce the amount of time between testing and diagnosis.

20. Claim 15/12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Tanaka'960.

Goodman'613 discloses all the elements of the current invention, as applied to Claim 12 above, and further discloses that the device comprises a central processing unit (CPU) (element 5) that is used to store the physiological data to memory for future retrieval (column 18, lines 14-16). Goodman'613 does not disclose the memory unit storing the data in chronological order.

Tanaka'960 teaches a device for measurement of physiological signals comprising a memory device that stores said signals in chronological order (paragraph [0035]), in order to more easily store and retrieve the data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the device of Goodman'613 with the chronological memory storage of Tanaka'960, in order to more easily store and retrieve the data.

21. Claim 15/13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Utsugi'228 as applied to claim 13 above, and further in view of Tanaka'960.

Goodman'613 in view of Utsugi'228 discloses all the elements of the current invention, as applied to Claim 12 above; Goodman'613 further discloses that the device comprises a central processing unit (CPU) (element 5) that is used to store the physiological data to memory for future retrieval (column 18, lines 14-16). Goodman'613 in view of Utsugi'228 does not disclose the memory unit storing the data in chronological order.

Tanaka'960 teaches a device for measurement of physiological signals comprising a memory device that stores said signals in chronological order (paragraph [0035]), in order to more easily store and retrieve the data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the device of Goodman'613 in view of Utsugi'228 with the chronological memory storage of Tanaka'960, in order to more easily store and retrieve the data.

22. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Tanaka'960.

Goodman'613 discloses all the elements of the current invention, as applied to Claim 16 above, and further discloses that the device comprises a central processing unit (CPU) (element 5) that is used to store the physiological data to memory for future retrieval (column 18, lines 14-16). Goodman'613 does not disclose the memory unit storing the data in chronological order.

Tanaka'960 teaches a device for measurement of physiological signals comprising a memory device that stores said signals in chronological order (paragraph [0035]), in order to more easily store and retrieve the data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the device of Goodman'613 with the chronological memory storage of Tanaka'960, in order to more easily store and retrieve the data.

23. Claim 17/12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Tanaka'960.

Goodman'613 in view of Tanaka'960 discloses all the elements of the current invention, as applied to Claim 15/12 above, except for the display unit showing the chronologically stored indices. Goodman'613 further discloses that the display unit (element 7) may be used to display data stored in the CPU (element 5) (column 18, lines 16-17).

24. Claim 17/13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Utsugi'228 and Tanaka'960.

Goodman'613 in view of Utsugi'228 and Tanaka'960 discloses all the elements of the current invention, as applied to Claim 15/13 above, except for the display unit showing the chronologically stored indices. Goodman'613 further discloses that the display unit (element 7) may be used to display data stored in the CPU (element 5) (column 18, lines 16-17).

25. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Tanaka'960.

Goodman'613 in view of Tanaka'960 discloses all the elements of the current invention, as applied to Claim 16 above, except for the display unit showing the chronologically stored indices. Goodman further discloses that the display unit (element 7) may be used to display data stored in the CPU (element 5) (column 18, lines 16-17).

26. Claim 19/12,14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Ogura'754.

Goodman'613 discloses all the elements of the current invention, as applied to Claims 12 and 14 above, except for the computation unit adjusting the calculated index based on an adjustment factor of the subject.

Ogura'754 teaches a pulse wave detecting device that uses adjustment factors (elements T and ST) to adjust the measured pulse wave of the subject, since the measured pulse wave is dependent upon said factors (column 8, lines 47-62, and column 13, lines 41-59).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the apparatus of Goodman'613 and used adjustment factors to adjust the measured pulse wave of the subject, as taught by Ogura'754, because the measured pulse wave is dependent upon adjustment factors.

27. Claim 19/13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Utsugi'228, as applied to claim 13 above, and further in view of Ogura'754.

Goodman'613 in view of Utsugi'228 discloses all the elements of the current invention, as applied to Claim 13 above, except for the computation unit adjusting the calculated index based on an adjustment factor of the subject.

Ogura'754 teaches a pulse wave detecting device that uses adjustment factors (elements T and ST) to adjust the measured pulse wave of the subject, since the measured pulse wave is dependent upon said factors (column 8, lines 47-62, and column 13, lines 41-59).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the apparatus of Goodman'613 and Utsugi'228, and used adjustment factors to adjust the measured pulse wave of the subject, as taught by Ogura'754, because the measured pulse wave is dependent upon adjustment factors.

28. Claim 19/16,18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Tananka'960, and further in view of Ogura'754.

Goodman'613 in view of Tananka'960 discloses all the elements of the current invention, as applied to Claims 16 and 18 above, except for the computation unit adjusting the calculated index based on an adjustment factor of the subject.

Ogura'754 teaches a pulse wave detecting device that uses adjustment factors (elements T and ST) to adjust the measured pulse wave of the subject, since the measured pulse wave is dependent upon said factors (column 8, lines 47-62, and column 13, lines 41-59).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the apparatus of Goodman'613 in view of Tananka'960 and used adjustment factors to adjust the measured pulse wave of the subject, as taught by Ogura'754, because the measured pulse wave is dependent upon adjustment factors.

29. Claim 20/12,14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Ogura'675.

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Goodman'613 discloses all the elements of the current invention, as applied to Claims 12 and 14 above, except for one of the indices comprising an augmentation index.

Ogura'675 teaches a pressure pulse wave detection and processing device comprises an augmentation index (paragraph [0002]), since that is a well-known indicator of patient condition.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the device of Goodman'613, with one of the indices comprising an augmentation index, as taught by Ogura'675, because that is a well-known indicator of patient condition.

30. Claim 20/13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Utsugi'228, and further in view of Ogura'675.

Goodman'613 in view of Utsugi'228 discloses all the elements of the current invention, as applied to Claim 13 above, except for one of the indices comprising an augmentation index.

Ogura'675 teaches a pressure pulse wave detection and processing device comprises an augmentation index (paragraph [0002]), since that is a well-known indicator of patient condition.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the device of Goodman'613 in view of Utsugi'228, with one of the indices comprising an augmentation index, as taught by Ogura'675, because that is a well-known indicator of patient condition.

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31. Claim 20/16, 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Tananka'960, and further in view of Ogura'675.

Goodman'613 in view of Tananka'960 discloses all the elements of the current invention, as applied to Claims 16 and 18 above, except for one of the indices comprising an augmentation index.

Ogura'675 teaches a pressure pulse wave detection and processing device comprises an augmentation index (paragraph [0002]), since that is a well-known indicator of patient condition.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the device of Goodman'613 in view of Tananka'960, with one of the indices comprising an augmentation index, as taught by Ogura'675, because that is a well-known indicator of patient condition.

32. Claim 21/12,14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Ogura'675.

Goodman'613 in view of Ogura'675 discloses all the elements of the current invention, as applied to Claim 20/12,14 above, except for the computation unit adjusting the calculated augmentation index based on a pulse of the subject.

Ogura'675 further teaches determining the augmentation index with respect to the pulse of the subject (paragraph [0065]), since the subject's pulse is a factor in the measured pulse wave.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the device of Goodman'613 in view of Ogura'675,

and determined the augmentation index with respect to the subject's pulse, as taught by Ogura'675, because the subject's pulse is a factor in the measured pulse wave.

33. Claim 21/13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Utsugi'228 and Ogura'675.

Goodman'613 in view of Utsugi'228 and Ogura'675 discloses all the elements of the current invention, as applied to Claim 20/13 above, except for the computation unit adjusting the calculated augmentation index based on a pulse of the subject.

Ogura'675 further teaches determining the augmentation index with respect to the pulse of the subject (paragraph [0065]), since the subject's pulse is a factor in the measured pulse wave.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the device of Goodman'613 in view of Utsugi'228 and Ogura'675, and determined the augmentation index with respect to the subject's pulse, as taught by Ogura'675, because the subject's pulse is a factor in the measured pulse wave.

34. Claim 21/16,18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Tananka'960 and Ogura'675.

Goodman'613 in view of Tananka'960 and Ogura'675 discloses all the elements of the current invention, as applied to Claim 20/16,18 above, except for the computation unit adjusting the calculated augmentation index based on a pulse of the subject.

Ogura'675 further teaches determining the augmentation index with respect to the pulse of the subject (paragraph [0065]), since the subject's pulse is a factor in the measured pulse wave.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the device of Goodman'613 in view of Tananka'960 and Ogura'675, and determined the augmentation index with respect to the subject's pulse, as taught by Ogura'675, because the subject's pulse is a factor in the measured pulse wave.

35. Claim 22/12,14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Ogura'675, and further in view of Hatschek'916.

Goodman'613 in view of Ogura'675 discloses all the elements of the current invention, as applied to Claim 20/12,14 above, except for an additional index comprising the time difference between the starting point of an ejection wave and the starting point of a reflection wave (ΔT_P).

Hatschek'916 teaches measuring the difference in phase between an ejection wave and a reflected wave (column 7, lines 51-56) in order to measure the velocity of the pressure pulse wave (column 8, lines 16-20), since that is a well-known indicator of patient condition.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the device of Goodman'613 in view of Ogura'675, with an additional index comprising ΔT_P , as taught by Hatschek'916, because that is a well-known indicator of patient condition.

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36. Claim 22/13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Utsugi'228 and Ogura'675, as applied to claim 20/13 above, and further in view of Hatschek'916.

Goodman'613 in view of Utsugi'228 and Ogura'675 discloses all the elements of the current invention except for an additional index comprising the time difference between the starting point of an ejection wave and the starting point of a reflection wave (ΔT_P).

Hatschek'916 teaches measuring the difference in phase between an ejection wave and a reflected wave (column 7, lines 51-56) in order to measure the velocity of the pressure pulse wave (column 8, lines 16-20), since that is a well-known indicator of patient condition.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the device of Goodman'613 in view of Utsugi'228 and Ogura'675, with an additional index comprising ΔT_P , as taught by Hatschek'916, because that is a well-known indicator of patient condition.

37. Claim 22/16,18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Tananka'960 and Ogura'675, as applied to claim 20/16,18 above, and further in view of Hatschek'916.

Goodman'613 in view of Tananka'960 and Ogura'675 discloses all the elements of the current invention except for an additional index comprising the time difference between the starting point of an ejection wave and the starting point of a reflection wave (ΔT_P).

Hatschek'916 teaches measuring the difference in phase between an ejection wave and a reflected wave (column 7, lines 51-56) in order to measure the velocity of the pressure pulse wave (column 8, lines 16-20), since that is a well-known indicator of patient condition.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the device of Goodman'613 in view of Tananka'960 and Ogura'675, with an additional index comprising ΔT_P , as taught by Hatschek'916, because that is a well-known indicator of patient condition.

38. Claim 23/12,14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Ogura'675 and Hatschek'916 as applied to claim 22/12,14 above, and further in view of Ogura'754.

Goodman'613 in view of Ogura'675 and Hatschek'916 discloses all the elements of the current invention, as applied to claim 22/12,14 above, except for the computation unit adjusting the calculated index based on an adjustment factor of the subject.

Ogura'754 teaches a pulse wave detecting device that uses adjustment factors (elements T and ST) to adjust the measured pulse wave of the subject, since the measured pulse wave is dependent upon said factors (column 8, lines 47-62, and column 13, lines 41-59).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the apparatus of Goodman'613 in view of Ogura'675 and Hatschek'916 and used adjustment factors to adjust the measured pulse wave of

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the subject, as taught by Ogura'754, because the measured pulse wave is dependent upon adjustment factors.

39. Claim 23/13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Utsugi'228, Ogura'675, and Hatschek'916, as applied to claim 22/13 above, and further in view of Ogura'754.

Goodman'613 in view of Utsugi'228, Ogura'675, and Hatschek'916 discloses all the elements of the current invention, as applied to claim 22/13 above, except for the computation unit adjusting the calculated index based on an adjustment factor of the subject.

Ogura'754 teaches a pulse wave detecting device that uses adjustment factors (elements T and ST) to adjust the measured pulse wave of the subject, since the measured pulse wave is dependent upon said factors (column 8, lines 47-62, and column 13, lines 41-59).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the apparatus of Goodman'613 in view of Utsugi'228, Ogura'675, and Hatschek'916 and used adjustment factors to adjust the measured pulse wave of the subject, as taught by Ogura'754, because the measured pulse wave is dependent upon adjustment factors.

40. Claim 23/16,18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Tanaka'960, Ogura'675, and Hatschek'916 as applied to claim 22/16,18 above, and further in view of Ogura'754.

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Goodman'613 in view of Tanaka'960, Ogura'675, and Hatschek'916 discloses all the elements of the current invention, as applied to claim 22/16,18 above, except for the computation unit adjusting the calculated index based on an adjustment factor of the subject.

Ogura'754 teaches a pulse wave detecting device that uses adjustment factors (elements T and ST) to adjust the measured pulse wave of the subject, since the measured pulse wave is dependent upon said factors (column 8, lines 47-62, and column 13, lines 41-59).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the apparatus of Goodman'613 in view of Tanaka'960, Ogura'675, and Hatschek'916 and used adjustment factors to adjust the measured pulse wave of the subject, as taught by Ogura'754, because the measured pulse wave is dependent upon adjustment factors.

41. Claim 24/14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Utsugi'228.

Goodman'613 discloses all the elements of the current invention, as applied to claim 14 above, except for the display unit showing a prescription based on the patient's physiological measurements. Goodman'613 further discloses that the apparatus comprises a communication network (element 18) that is used to bring the local results into contact with outside storage, databases, and users, so that further processing and analysis of the patient's condition may be assessed.

Utsugi'228 teaches a communication network for health systems that is used to bring local results into contact with outside storage, databases, and users (Figures 1, 3, and 4). The communication network is also used to allow a prescription data processing section to communicate with the subject, so that prescriptions may be displayed in response to the subject's physiological measurements in order to reduce the amount of time between testing and diagnosis.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the apparatus of Goodman'613 and further included the prescription data processing section of Utsugi'228 as part of the communication network in order to reduce the amount of time between testing and diagnosis.

42. Claim 24/16,18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman'613 in view of Tanaka'960 as applied to claims 16 and 18 above, and further in view of Utsugi'228.

Goodman'613 in view of Tanaka'960 discloses all the elements of the current invention, as applied to claim 14 above, except for the display unit showing a prescription based on the patient's physiological measurements. Goodman'613 further discloses that the apparatus comprises a communication network (element 18) that is used to bring the local results into contact with outside storage, databases, and users, so that further processing and analysis of the patient's condition may be assessed.

Utsugi'228 teaches a communication network for health systems that is used to bring local results into contact with outside storage, databases, and users (Figures 1, 3, and 4). The communication network is also used to allow a prescription data processing

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section to communicate with the subject, so that prescriptions may be displayed in response to the subject's physiological measurements in order to reduce the amount of time between testing and diagnosis.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the apparatus of Goodman'613 in view of Tananka'960 and further included the prescription data processing section of Utsugi'228 as part of the communication network in order to reduce the amount of time between testing and diagnosis.

Conclusion

43. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent Application Publication 2002/0091328 to Ogura, which discloses a pulse wave measuring apparatus.

44. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen E. Toth whose telephone number is 571-272-6824. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on 571-272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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